

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN NOVEMBER 2005

According to Platts Metals Week, the price of platinum continued its climb that started in late July. The release of the Johnson Matthey Platinum plc (London, United Kingdom) 2005 Interim Review, which reported that the platinum deficit would increase, caused the price to reach a 25-year record of \$998 per troy ounce. The price of palladium climbed from \$221 per troy ounce, at the beginning of the month, to a new 18-month high of \$264 per troy ounce on November 29. With continued concerns about the adequacy of supply, the price of rhodium reached \$3,110 per troy ounce on November 16, after which the price started to decline and ended the month at \$3,000 per troy ounce. In contrast, the price of ruthenium remained unchanged and iridium increased to \$190 per troy ounce on November 16.

On December 5, the Defense National Stockpile Center (DNSC) (2005) announced the November platinum-group metal (PGM) sales results under Basic Ordering Agreement DLA-PGM-002. In November, DNSC sold 31.1 kilograms (kg) of iridium, valued at approximately \$183,000 to Heraeus (New York, NY) and PGM Trading Corporation (New York, NY).

In the newly released 2005 Interim Review by Johnson Matthey, it was estimated that the palladium surplus would be reduced by 12,000 kg to 235,000 kg because of a reduction in shipments from Russia and increased demand for palladium jewelry, particularly in China. The platinum deficit was estimated to have increased to 4,000 kg in 2005 and marked the seventh year of deficit. According to the report "Demand for platinum is forecast to expand by 2% in 2005 and to reach a new high of 6.71 million oz [209,000 kg]...Autocatalyst demand for platinum is projected to rise by 8 percent to 3.86 million oz [120,000 kg]. Diesel car sales continue to climb in Europe, and

regulation of emissions from both light and heavy duty diesel vehicles is tightening worldwide." The supply of platinum was predicted to increase to 205,000 kg in 2005, up 2% as compared with that of 2004 (Kendall, 2005, p. 2-7).

The Stillwater Mining Company (Billings, MT) produced 3,980 kg of palladium and platinum in the third quarter 2005. This was 6% higher than that of the third quarter 2004 and was the result of improved output at the East Boulder Mine and the strike at the Stillwater Mine in the third quarter 2004 (Stillwater Mining Company, 2005, p. 2).

On November 29, Aquarius Platinum Limited (Johannesburg, South Africa) announced the first shipment of concentrates from the Everest Platinum Mine in South Africa. Aquarius predicts that the open-pit and underground mine located near the town of Lydenburg on the Eastern Limb of the South African Bushveld Complex will produce 7,000 kg of PGMs in 2006 (Aquarius Platinum Limited, 2005).

References Cited

- Aquarius Platinum Limited, 2005, First concentrates produced and shipped from the Everest Platinum Mine: Johannesburg, South Africa, Aquarius Platinum Limited news release, November 30, 1 p.
Defense National Stockpile Center, 2005, Stockpile announces PGM BOA sales for November 2005: Fort Belvoir, VA, Defense National Stockpile Center news release, December 5, 1 p.
Kendall, Tom, 2005, Platinum 2005 interim review: London, United Kingdom, Johnson Matthey plc, November 16, 28 p.
Stillwater Mining Company, 2005, Stillwater mining reports third quarter results: Billings, MT, Stillwater Mining Company news release, November 4, 18 p.

TABLE 1
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

	Platinum	Palladium	Rhodium	Iridium	Ruthenium
2004:					
Low/date	771.00 May 10	180.00 Dec. 17	500.00 Jan. 5 and 6	87.00 Feb. ²	41.00 Jan. 5 and 6
High/date	940.00 Apr. 19	340.00 Apr. 12	1,525.00 Aug. 9 and 10	230.00 Mar. and Apr. ²	80.00 Nov. ²
Average	848.76	232.93	983.24	185.33	64.22
2005:					
September:					
Low/date	900.00/1	184.00/12,13,14	2,225.00/1	180.00 ²	85.00 ²
High/date	934.00/20	203.00/20	2,750.00/30	185.00 ²	85.00 ²
Average	918.10	191.24	2,472.38	182.38	85.00
October:					
Low/date	917.00/5	194.00/5	2,600.00 ²	185.00 ²	85.00 ²
High/date	944.00/27	229.00/27 and 31	3,000.00/6 and 7	185.00 ²	85.00 ²
Average	933.76	209.71	2,755.71	185.00	85.00
November:					
Low/date	926.00/1	221.00/1	2,730.00/1	185.00 ²	85.00 ²
High/date	998.00/28	270.00/21	3,110.00/17 and 18	190.00 ²	85.00 ²
Average	964.00	246.35	2,948.50	187.25	85.00
Year to date:					
Low/date	847.00 Jan. 4	174.00 Jul. 5	1,330.00 Jan. ²	145.00 Feb., Mar., Apr. ²	55.00 Feb. and Mar. ²
High/date	998.00 Nov. 28	270.00 Nov. 21	3,110.00 Nov. 17 and 18	190.00 Nov. ²	85.00 Jul. - Nov. ²
Average	892.05	197.74	1,972.82	167.36	73.33

¹Quotes from Engelhard Industries.

²Occured multiple days in month listed.

Source: Platts Metals Week.

TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF PLATINUM METAL, BY COUNTRY¹

(Kilograms metal content, unless otherwise specified)

Period and country	Platinum grain and nuggets		Platinum sponge		Other unwrought platinum		Platinum, other		Platinum waste and scrap		Platinum coins	
	Value		Value		Value		Value		Value		Value	
	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
2004	376	\$9,520	68,800	\$1,830,000	6,710	\$178,000	4,550	\$105,000	590,000	\$135,000	12	\$345
2005:												
August	25	727	5,110	147,000	101	2,300	540	9,070	824	16,100	4	132
September	153	4,250	5,900	172,000	62	2,110	809	20,000	7,330	27,600	1	27
October:												
Australia	--	--	--	--	--	--	--	--	2,610	2,000	--	--
Austria	--	--	--	--	1 ²	10	--	--	--	--	--	--
Belgium	--	--	121	3,540	--	--	--	--	--	--	--	--
Brazil	--	--	131	3,480	--	--	(3) ²	7	--	--	--	--
Canada	(3)	14	--	--	(3)	7	23 ²	499	8,560	2,090	1	37
China	--	--	--	--	--	--	--	--	12	601	--	--
Colombia	12	318	--	--	7	222	--	--	9,680 ²	184	--	--
Dominican Republic	--	--	--	--	--	--	--	--	8	3	--	--
Germany	--	--	852	25,400	5	125	245 ²	3,210	--	--	--	--
Ireland	--	--	--	--	--	--	(3)	4	--	--	--	--
Italy	--	--	5	148	--	--	128	2,860	--	--	--	--
Japan	--	--	--	--	9 ²	31	1	27	1,040	576	--	--
Korea, Republic of	--	--	--	--	--	--	--	--	4,980	9,540	--	--
Netherlands	--	--	--	--	--	--	(3) ²	3	--	--	--	--
Norway	--	--	64	1,830	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	2,340	120	--	--
Russia	--	--	126 ²	2,660	--	--	28	830	--	--	--	--
South Africa	--	--	2,960	86,300	--	--	--	--	--	--	--	--
Switzerland	--	--	--	--	--	--	6 ²	92	--	--	--	--
Taiwan	(3) ²	2	--	--	--	--	--	--	--	--	--	--
United Kingdom	16	506	1,170	33,900	20	706	104 ²	2,070	61,400 ²	1,720	--	--
Total	29	840	5,430	157,000	42	1,100	537	9,600	90,600	16,800	1	37
Year to date	275	7,750	58,200	1,630,000	1,290	33,900	5,950	123,000	158,000	134,000	21	526

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²All or part of these data have been referred to the U.S. Census Bureau for verification.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF PLATINUM-GROUP METALS, BY COUNTRY¹

(Kilograms metal content, unless otherwise specified)

Period and country	Unwrought palladium		Palladium, other		Iridium ²		Unwrought osmium		Unwrought ruthenium		Rhodium ³	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2004	106,000	\$786,000	20,700	\$145,000	3,230	\$18,000	75	\$421	18,800	\$35,900	13,200	\$397,000
2005:												
August	7,990	48,500	782	4,030	151	933	10	100	2,270	4,700	1,210	73,800
September	10,100	60,700	944	4,600	94	565	--	--	1,750	4,650	1,180	78,800
October:												
Belgium	92	602	--	--	--	--	--	--	--	--	15	1,120
China	100	690	--	--	--	--	--	--	--	--	--	--
France	--	--	2 ⁴	6	--	--	--	--	--	--	--	--
Germany	37 ⁴	236	40 ⁴	172	17	96	--	--	572	1,610	60	4,320
Italy	534 ⁴	1,770	1 ⁴	3	--	--	--	--	--	--	6	391
Japan	360 ⁴	1,120	161 ⁴	172	--	--	--	--	6 ⁴	6	8	533
Norway	656	4,230	--	--	--	--	--	--	--	--	7	446
Russia	1,040	6,370	1,410	6,900	--	--	--	--	--	--	32	2,300
South Africa	3,600	22,100	--	--	79	439	--	--	812	2,050	648	49,700
Switzerland	--	--	76	417	--	--	--	--	--	--	--	--
United Kingdom	1,690 ⁴	11,400	27 ⁴	93	44	286	--	--	165 ⁴	157	357 ⁴	28,700
Total	8,110	48,500	1,720	7,770	140	821	--	--	1,560	3,820	1,130	87,500
Year to date	79,100	472,000	10,300	59,900	2,510	13,800	39	362	19,700	40,600	11,500	642,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Unwrought and other forms of iridium.

³Unwrought and other forms of rhodium.

⁴All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF PLATINUM-GROUP METALS, BY COUNTRY¹

(Kilograms of metal content, unless otherwise specified)

Period and country	Platinum ²		Platinum waste and scrap		Palladium ²		Iridium, osmium, and ruthenium ^{2,3}		Rhodium ²	
	Value		Value		Value		Value		Value	
	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
2004	20,000	\$374,000	28,400	\$520,000	31,400	\$142,000	1,090	\$8,800	311	\$7,800
2005:										
August	1,730	43,300	1,770	36,700	2,350	10,200	67	489	28	2,130
September	1,770	41,500	1,360	27,800	2,660	11,100	157	969	54	3,240
October:										
Argentina	129	3,400	--	--	3	21	--	--	--	--
Australia	3 ⁴	59	--	--	23	198	--	--	--	--
Austria	10 ⁴	162	--	--	--	--	--	--	--	--
Belarus	--	--	--	--	30 ⁴	52	--	--	--	--
Belgium	1	24	--	--	1 ⁴	6	--	--	--	--
Canada	77 ⁴	1,870	174 ⁴	1,660	163 ⁴	1,130	--	--	(5) ⁴	5
Chile	118	3,100	--	--	--	--	--	--	--	--
China	--	--	5	44	11	44	--	--	--	--
Colombia	--	--	--	--	2	17	--	--	--	--
Denmark	--	--	--	--	5	46	--	--	--	--
Finland	1 ⁴	12	--	--	1 ⁴	15	--	--	--	--
France	8 ⁴	113	--	--	50	261	--	--	--	--
Germany	170 ⁴	2,930	9	119	405 ⁴	902	59	433	--	--
Hong Kong	90 ⁴	2,190	--	--	38 ⁴	185	12	74	(5) ⁴	13
Hungary	1 ⁴	10	--	--	--	--	--	--	--	--
India	--	--	--	--	--	--	--	--	1 ⁴	188
Ireland	9 ⁴	196	--	--	6 ⁴	16	--	--	--	--
Israel	--	--	--	--	--	--	6	25	--	--
Italy	422	12,600	--	--	22	174	--	--	3	274
Japan	275 ⁴	7,610	213	6,550	242 ⁴	1,030	12 ⁴	90	--	--
Korea, Republic of	44 ⁴	1,120	--	--	51 ⁴	144	--	--	--	--
Lebanon	--	--	--	--	13 ⁴	30	--	--	--	--
Malaysia	1 ⁴	9	--	--	(5)	3	44	293	--	--
Mexico	72 ⁴	1,730	--	--	3 ⁴	35	(5) ⁴	7	1 ⁴	82
Netherlands	4 ⁴	63	--	--	2	14	--	--	--	--
New Zealand	--	--	--	--	2	21	--	--	--	--
Norway	2 ⁴	35	--	--	3 ⁴	31	--	--	--	--
Philippines	3 ⁴	41	--	--	1	7	--	--	--	--
Poland	--	--	--	--	2 ⁴	10	--	--	--	--
Qatar	--	--	--	--	1	7	--	--	--	--
Singapore	2 ⁴	53	--	--	2 ⁴	19	--	--	--	--
South Africa	--	--	--	--	24	140	--	--	--	--
Spain	(5) ⁴	3	--	--	50 ⁴	144	--	--	--	--
Sweden	6 ⁴	106	--	--	3	26	--	--	--	--
Switzerland	7 ⁴	105	--	--	66	523	(5) ⁴	3	--	--
Taiwan	61 ⁴	1,440	--	--	191 ⁴	374	--	--	--	--
Thailand	6 ⁴	102	--	--	48 ⁴	96	--	--	--	--
Turkey	1 ⁴	15	--	--	--	--	--	--	--	--
United Kingdom	242 ⁴	5,590	2,490	53,600	1,740 ⁴	5,000	(5) ⁴	13	(5) ⁴	25
Other	1 ⁴	17	--	--	6 ⁴	30	--	--	--	--
Total	1,770	44,700	2,890	62,000	3,210	10,700	133	937	5	585
Year to date	17,500	376,000	21,200	399,000	22,900	101,000	778	5,460	282	18,400

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Unwrought and other forms.

³Gross weight.

⁴All or part of these data have been referred to the U.S. Census Bureau for verification.

⁵Less than ½ unit.

Source: U.S. Census Bureau.